DOCKET NO. A87-610/TOM GENTRY AND GENTRY-PACIFIC, LTD.

MOTION TO AMEND THE FINDINGS OF FACT, CONCLUSIONS OF LAW AND DECISION AND ORDER DATED MAY 17, 1988

STAFF REPORT

ACTION MEETING October 29, 2014

Daniel Orodenker, Executive Officer

Submitted: October 22, 2014

TABLE OF CONTENTS

Tab]	Tab No.	
1.	Chronology of Significant Events	3
2.	Status of the Project	6
3.	Proposed Plans for the Petition Area	7
4.	Synopsis of the Motion	9
5.	Summary of Project Impacts	10
6.	Compliance with the Conditions	19
7.	Position of the Parties	23
8.	Recommendation	27

1. CHRONOLOGY OF SIGNIFICANT EVENTS

<u>Date</u>	<u>Event</u>		
April 21, 1987	Tom Gentry and Gentry-Pacific, Ltd. ("Petitioner"), filed a Petition for Boundary Amendment ("Petition") to reclassify approximately 1,395 acres of land identified as Tax Map Keys: 9-4-06: por. 26; 9-6-04: por. 1 and por. 16; and 9-6-05: por. 1, por. 7, and por. 14 ("Petition Area")		
	from the Agricultural District to the Urban District for a residential community at Waiawa, Oahu, Hawaii.¹ The proposed community consisted of the following:²		
	<u>Use</u>	Acreage	Units
	Residential Single-Family Conventional Retirement/Leisure Village	402 325	3,216 2,600
	Multi-Family Low-Density Conventional Low-Density Retirement/ Leisure Village	* *	540 1,100
	Medium-Density Retirement/Leisure Village	15 e	450
	Commercial	5	
	Commercial/Industrial	110	
	Two Golf Courses, Open Space, Parks, School	393	
	Major Roadways	63	

1,395

Total

7,906

¹ Petitioner had a development agreement with Bernice P. Bishop Estate, owner of the Petition Area, which gave it the right to purchase those portions of the Petition Area designated for residential use and to lease the areas designated for non-residential use. The current tax map keys for the Petition Area are as follows: 9-4-06: por. 34, por. 35, 36, por. 37; 9-6-04: por. 24, 25, 26; and 9-6-05: por. 1.

² Information obtained from the Findings of Fact, Conclusions of Law and Decision and Order dated May 17, 1988 ("Decision and Order").

	*Acreage was not available at the time of the issuance of the Decision and Order. Balance of missing acreage amounts to approximately 82 acres.
July 14-15, August 11-12, 27, November 16, December 17, 1987; January 19-20, 1988	The Commission opened and continued the hearing on the Petition.
March 29, 1988	The Commission approved the reclassification of the Petition Area, subject to ten conditions.
May 17, 1988	The Commission issued its Decision and Order.
October 12, 1990	Petitioner filed a Motion to Amend Condition No. 6 of the Decision and Order Dated May 17, 1988 ("Motion to Amend Condition No. 6").3
October 29, 1990	The Commission approved the Motion to Amend Condition No. 6.
November 30, 1990	The Commission issued its Order Granting Motion to Amend Condition No. 6 of the Decision and Order Dated May 17, 1988.
June 28, 1996	The Commission heard a status report from Petitioner on the proposed residential community. ⁴
May 13, 2014	Janeen-Ann Ahulani Olds, Lance Keawe Wilhelm, Robert K.W.H. Nobriga, Corbett Aaron Kamohaikiokalani Kalama, and Micah A. Kane, as Trustees of the Estate of Bernice Pauahi Bishop, dba Kamehameha Schools ("Kamehameha Schools" or "Movant"), filed the Motion

³ Condition No. 6 required Petitioner to appoint and fund a transportation manager whose function was to develop, use, and continue with alternative transportation opportunities to maximize the use of existing and proposed transportation systems.

for Order Amending Findings of Fact, Conclusions of Law

⁴ In its presentation, Petitioner, among other things, provided an overview of the project and briefly discussed the infrastructural requirements of the project and its then pending zoning application before the City and County of Honolulu.

	and Decision and Order Dated May 17, 1988, and Exhibits 1 through 18 (collectively "Motion").
June 16, 2014	The Office of Planning ("OP") filed its Response to the Motion, List of Witnesses, and Exhibits 1 through 6.
	The Department of Planning and Permitting ("DPP") filed its Statement of Position on the Motion.
June 20, 2014	Kamehameha Schools filed its First List of Exhibits, Exhibits 8 (Errata) and 19 through 34, and First List of Rebuttal Witnesses.
	OP filed its List of Exhibits and Exhibits 7 and 8.
October 10, 2014	Kamehameha Schools filed its List of Rebuttal Exhibits, Exhibits 35 through 39, and Supplemented List of Witnesses.
October 29, 2014	Meeting on Motion scheduled.

2. STATUS OF THE PROJECT

Since receipt of the boundary amendment in 1988, the Honolulu City Council passed Ordinance 98-55 that amended a portion of the Development Plan Land Use Map to support the proposed residential community. Petitioner also obtained rezoning of 1,049.43 acres of the Petition Area. Ordinance Nos. 98-01, effective January 15, 1998 (as amended by Ordinance 98-69, effective December 17, 1998), rezoned 874 acres from Restricted Agriculture (AG-1) to Neighborhood Business District (B-1), Community Business District (B-2), Low Density Apartment District (A-1), Industrial-Commercial Mixed Use District (IMX1), Residential (RS), and General Preservation (P-2). Ordinance No. 03-01, effective February 12, 2003, rezoned 175.43 acres within the Petition Area from AG-1 to R-5, A-1, Medium Density Apartment District (A-2), and P-2.

In 2006, Petitioner entered into an agreement with A&B Waiawa, LLC, to form Waiawa Ridge Development LLC to develop the Waiawa Ridge project on the Petition Area. However, due to the financial collapse in 2008, plans to commence with the development failed to materialize, and Kamehameha Schools began the process of regaining full control over the Petition Area, which it did in late 2012.

3. PROPOSED PLANS FOR THE PETITION AREA

At the present time, Kamehameha Schools is reevaluating the original residential community proposed by Petitioner as well as other options for development of the Petition Area. In the interim, Kamehameha Schools has determined that the Petition Area would be best used as a utility-scale solar energy project for a period of approximately 30 years (with the total interim use period not to exceed 35 years).⁵

SunEdison was selected to develop the solar farm on portions of the Petition Area. It is proposed that the solar farm be contained within one or more utility easement areas. Access to the utility easement areas will be provided over existing roads. The first phase of the project will be designed to produce 50 megawatts ("MW") of power, an amount that could power approximately 9,800 homes each year for the term of the development. The solar panels for this first phase are planned to be installed within a footprint of approximately 250 acres in a 387-acre section located in the northwest portion of the Petition Area.⁶ Under the proposal, the operational term of Phase 1 will run approximately 30 years.

SunEdison may undertake a second phase of the solar project. If so, it is anticipated that this phase would produce up to 65 MW of power. The solar panels for this phase would be installed within an approximately 268-acre section in the southwest portion of the

Under CCHHI's development timetable, Castle & Cooke Waiawa was projected to be completed by 2026, provided that work on essential infrastructure for the adjoining Waiawa Ridge development on the Petition Area began in 2019.

⁵ By Findings of Fact, Conclusions of Law, and Decision and Order filed June 21, 2012, in Docket No. A11-793, the Commission approved the reclassification of approximately 576.435 acres of land (Koa Ridge Makai) and the incrementally redistricting of approximately 191.214 acres of land (Castle & Cooke Waiawa) from the State Land Use Agricultural District to the State Land Use Urban District. During the hearings, Castle & Cooke Homes Hawaii, Inc. ("CCHHI"), represented that development of Castle & Cooke Waiawa was dependent on infrastructure improvements to be constructed by an as yet undetermined developer of Waiawa Ridge on the Petition Area. These improvements included the eastward extension of Ka Uka Boulevard across Panakauahi Gulch; the provision of sewer lines from Waiawa Ridge to the City's Pearl City wastewater pump station; water system source, storage, and transmission improvements; construction of an electrical power substation to be constructed with the initial phase of Waiawa Ridge; and Interstate H-2 Waiawa Interchange improvements. CCHHI further represented that it did not plan to begin any site work on the Waiawa land until the developer of Waiawa Ridge completed its share of infrastructure improvements.

⁶ Since the filing of the Motion, Kamehameha Schools revised the acreage for Phase I. The acreage originally cited was 300 acres.

Petition Area. ⁷ The operational term of Phase 2 would end no later than the term of Phase 1.

The energy from the solar panels will be transported to a 46 kilowatt ("kV") project substation and battery storage area. This facility will be sited within the easement area in proximity to the western side of the Petition Area, approximately 1,000 feet from the H-2 Freeway. An existing 46kV transmission line located across and within the Petition Area running along the H-2 Freeway will connect the solar energy.

SunEdison plans to initiate the site preparation and construction for Phase 1 by June 2015. The entire construction period for Phase 1 could take up to 12 months, consisting of three months for all grading activities and nine months for panel installation. Full operation of the site is anticipated by June 2016. The operational timeframe of the solar farm is between 2036 and 2046. The actual term of the operational phase will be determined by the Power Purchase Agreement to be negotiated between SunEdison and Hawaiian Electric Company ("HECO"). Following the operational phase, decommissioning of the solar farm is anticipated to take approximately 12 months. All foundational piers and modules and associated components would be removed and recycled to the extent possible.

The guiding force behind the timeframe to commence with the development is the 30 percent federal investment tax credits. These tax credits will allow SunEdison to offer the power at the currently proposed low price. In order to take advantage of the current rate, Phase 1 should be in commercial operations no later than June 2016. Starting in 2017, the rate at which these tax credits will be available will be 10 percent.

⁷ Kamehameha Schools also revised the acreage for Phase 2 that was identified in the Motion. The acreage originally cited was 277 acres.

4. SYNOPSIS OF THE MOTION

Kamehameha Schools requests that the Commission (1) recognize Kamehameha Schools as the successor to Petitioner with standing to seek and obtain an amendment to the Decision and Order; and (2) issue an order modifying said Decision and Order to expressly authorize the use of portions of the Petition Area for development of a solar farm for an interim period not to exceed 35 years.

5. SUMMARY OF PROJECT IMPACTS⁸

SOCIO-ECONOMIC IMPACTS

Social Impacts:

It is not anticipated that the proposed solar farm will have any adverse impacts on the community due to its nature and low

impact use.

Economic Impacts:

Given the nature and low impact use of the proposed solar farm, it is not expected that it will have adverse economic impacts on the community. It is projected that the development will reduce electricity costs, saving approximately \$145 million for Oahu ratepayers. Kamehameha Schools estimates that Phase 1 of the solar farm will generate enough power to support 9,800 homes, while Phase 2, if pursued, could generate power to support 12,740 homes and save approximately \$188 million in electrical costs.

IMPACTS UPON RESOURCES OF THE AREA

Agricultural Resources:

The soil types on the Petition Area consist of the following:

<u>U. S. Department of Agriculture, Natural Resource Conservation</u> Service (formerly the Soil Conservation Service)

Wahiawa Series – Well-drained soils that are characterized by moderately rapid permeability, slow runoff, and slight to medium to moderate erosion hazard. The soil on the Petition Area within this series is further broken down as follows:

Wahiawa silty clay, 0 to 3 percent slopes (WaA) Wahiawa silty clay, 3 to 8 percent slopes (WaB) Wahiawa silty clay, 8 to 15 percent slopes (WaC)

⁸ Information obtained from the Motion and/or the original Decision and Order and evidentiary record. The proposed solar farm is not subject to the environmental review process under chapter 343, Hawaii Revised Statutes ("HRS"); therefore, there is no environmental assessment or environmental impact statement prepared for the development. Statements that the proposed solar farm is not anticipated to impact certain areas of concern because of its nature and low impact use are based solely on staff's analysis of the description of the development in the Motion as Kamehameha Schools made no representations on the impacts to such areas.

Molokai Series – Well-drained soils that are characterized by moderate permeability, slow to medium runoff, and slight to moderate to severe erosion hazard. The soil on the Petition Area within this series is further broken down as follows:

> Molokai silty clay loam, 3 to 7 percent slopes (MuB) Molokai silty clay loam, 7 to 15 percent slopes (MuC) Molokai silty clay loam, 15 to 25 percent slopes (MuD)

Lahaina Series – Well-drained soils that are characterized by moderate permeability, slow to medium runoff, and slight to severe erosion hazard. The soil on the Petition Area within this series is further broken down as follows:

Lahaina silty clay, 0 to 3 percent slopes (LaA)
Lahaina silty clay, 3 to 7 percent slopes (LaB)
Lahaina silty clay, 7 to 15 percent slopes (LaC)
Lahaina silty clay, 7 to 15 percent slopes, severely eroded (LaC3)

Manana Series – Well-drained soils characterized by moderately to moderately rapid permeability, slow to rapid runoff, and slight to severe erosion hazard. The soil on the Petition Area within this series is further broken down as follows:

Manana silty clay loam, 12 to 25 percent slopes, eroded (MoD2)

Manana silty clay, 3 to 8 percent slopes (MpB)

Manana silty clay, 8 to 15 percent slopes (MpC)

Manana silty clay, 15 to 25 percent slopes (MpD)

Manana silty clay, 12 to 25 percent slopes, eroded (MpD2)

Helemano Series – Well-drained soils characterized by moderately rapid permeability, medium to rapid runoff, and severe to very severe erosion hazard. The soil on the Petition Area within this series is further broken down as follows:

Helemano silty clay, 30 to 90 percent slopes (HLMG)

⁹ This soil type was identified in Petitioner's Exhibit 6C entitled *The Agricultural Production Potential of Lands in the Waiawa Revised Development Plan by Gentry, Island of Oahu*, but not in the Decision and Order. The Decision and Order instead lists Manana silty clay loam, 2 to 6 percent slopes (MoB). Upon review of the actual *Soil Survey of Islands of Kauai, Oahu, Maui, Molokai, and Lanai, State of Hawaii* publication, staff believes that Petitioner's Exhibit 6C reflects the correct soil type.

Kawaihapai Series – Well-drained soils characterized by moderate permeability, slow runoff, and slight erosion hazard. The soil on the Petition Area within this series is further broken down as follows:

Kawaihapai stony clay loam, 2 to 6 percent slopes (KlaB)

Ewa Series – Well-drained soils characterized by moderate permeability, slow runoff, and slight erosion hazard. The soil on the Petition Area within this series is further broken down as follows:

Ewa silty clay loam, 3 to 6 percent slopes (EaB)

Rock land (rRK) – Very shallow soils characterized by rock outcrops with high shrink-swell potential.

Fill land (Fd) – Areas characterized by fill including bagasse, slurry from sugar mills, dredged material, and excavated soil.

Agricultural Lands of Importance to the State of Hawaii

The majority of the Petition Area consists of soils classified as "Prime." A smaller portion consists of soils classified as "Other Important Agricultural Lands."

Land Study Bureau

The Petition Area consists of "A" and "B" rated lands. "A" rated lands indicates the highest agricultural productivity, while "B" rated lands indicates minor limitations on agricultural productivity. The specific ratings are as follows: A30i, A49, A49i, A121i, B50i, B83i, and B122i.

According to Kamehameha Schools, no agricultural activities have taken place on the Petition Area since 1983. Kamehameha Schools believes that the proposed use of a portion of the Petition Area as a solar farm will not adversely impact agricultural production nor the use of any agriculturally designated lands.

Flora & Fauna:

The Petition Area was greatly modified by previous agricultural activity, which has affected the types of flora and fauna present. The flora is composed primarily of non-native species. Based on

the reconnaissance and assessment prepared in support the Petition, it was determined that the native species that were found were also found in similar habitats throughout the islands.

It is not anticipated that the development of the proposed solar farm will adversely impact the flora and fauna on the Petition Area given its nature and low impact use.

Archaeological/ Cultural Resources The State Historic Preservation Division ("SHPD") approved an archaeological reconnaissance and inventory survey of the Petition Area in 1992. In 2003, a Cultural Impact Statement ("CIA") was prepared, and in 2007, the SHPD approved a Cultural Resource Preservation Plan ("CRPP").

Kamehameha Schools' consultant has since prepared an Archaeological Inventory Survey ("AIS") of the Petition Area and submitted it to the SHPD by letter dated September 16, 2014.

Groundwater Resources:

The Petition Area is situated within the Koolau Subarea of the Pearl Harbor Groundwater Control Area. The aguifer is a major regional source for all of southern Oahu and portions of Honolulu and Waianae. At the time of the hearings on the Petition, the Koolau Subarea had an established sustainable yield of 200 million gallons per day ("MGD"). The authorized water withdrawals at that time totaled 199.91 MGD. The Waiawa Shaft is the primary source of drinking water for military and civilian users in the Pearl Harbor area. The shaft entrance is located adjacent to the Petition Area, along the western wall of Waiawa Stream. As an inclined shaft, infiltration galleries or other tunnels extend down toward the Petition Area to the surface of the groundwater aquifer as well as deeper into the lens. During the hearings, the U.S. Department of the Navy ("Navy") as well as others raised concerns about the potential for groundwater contamination from the proposed residential community. It was believed that drinking water drawn from the shaft could be contaminated by pesticides, compounds, or contaminants associated with urban development.

The Navy noted that all of its concerns have been adequately addressed, and that the development is a compatible land use within the designated Hydrologic Zone of Contribution.

According to Kamehameha Schools, the Department of Health ("DOH") has not raised objections to the proposed solar farm on the Petition Area in terms of the potential impacts to the groundwater resources.

The photovoltaic modules within the solar farm are planned to be mounted on pile-driven metal piers with limited concrete pads for the inverters and will passively collect solar energy. The solar modules will use fixed-tilt racking, and therefore will not have any moving parts or bearings that will require lubricants or oil filled transformers. Kamehameha Schools notes that prior to the installation of the foundations, geotechnical studies will be undertaken to ensure the appropriate depth of the piers. Kamehameha Schools represents that no piers will be driven to a depth that could reach the highest historical levels of groundwater.

In addition a variety of grasses will be used as groundcover for the solar farm. Kamehameha Schools further points out that if any activities take place within the hydrologic "zone of contribution," the vegetated groundcover will be maintained through mechanical means. Outside of the "zone of contribution," it is proposed that an EPA-certified herbicide will be employed to control the growth of vegetation. The herbicide will be used in compliance with all federal, state, and municipal laws.

Recreational Resources: There are no recreational resources on the Petition Area. Given the nature and low impact use of the proposed solar farm, it is not anticipated that it will require additional recreational facilities or adversely impact existing facilities in the region.

Visual Resources:

The topography of the Petition Area is relatively flat, with some steeper slopes running through the property. Elevation of the Petition Area ranges from approximately 100 feet to 600 feet above sea level. According to Kamehameha Schools, existing views

from the surrounding communities will remain intact. Views from Pacific Palisades, Ka Uka Boulevard, the Waipio Sports Park, and Waipio Uka Street will experience little change due to the development of either Phase 1 or Phase 2 of the solar farm.

ENVIRONMENTAL QUALITY

Noise:

The solar farm is anticipated to be a relatively passive operation. During the construction period for the solar farm, it is expected that an average of 50 workers will be onsite. During the three-month grading period, that number would be less. The largest number of workers onsite would occur during the peak installation period when the foundations, modules, and inverters are installed. Once completed, the facility is expected to be virtually silent aside from the few operational and maintenance workers that would be necessary each month.

Air Quality:

Other than fugitive dust and tailpipe emissions from vehicular traffic and landscape maintenance during its construction and operation, it is not anticipated that the solar farm will result in direct air emissions. According to Kamehameha Schools, Best Management Practices will be employed during construction.

ADEQUACY OF PUBLIC SERVICES AND FACILITIES

Highway/Roadway
Facilities:

The existing roads in the Petition Area are primarily used for agricultural purposes and to access the Waiawa Correctional Facility. Access to the Petition Area is available from the Mililani Cemetery Road and from Waihona Street. Mililani Cemetery Road is located toward the northern portion of the Petition Area and connects to Ka Uka Boulevard. Waihona Street is located at the southern end of the Petition Area and provides access to the Pearl City Industrial Park from Kamehameha Highway.

It is not anticipated that the proposed solar farm will require additional roadway facilities or adversely impact existing facilities in the region due to its nature and low impact use. During the construction period, it is expected that an average of 50 workers will be onsite. The three-month grading period would require fewer workers. The peak installation period when the

foundations, modules, and inverters are installed would require the greatest number of workers onsite. Once completed, a few operational and maintenance workers would be necessary onsite each month.

Kamehameha Schools points out that it is an active participant in the Leeward Oahu Transportation Management Association ("LOTMA"), which seeks to promote alternative transportation opportunities and to optimize the capacity and use of existing and proposed transportation systems.

Water Service:

It is not anticipated that the proposed solar farm will require additional water service infrastructural improvements or adversely impact existing facilities in the region given its nature and low impact use. Cleaning of the solar panels will be done twice a year (depending on rainfall) with water that will be trucked onto the site.

Wastewater Disposal:

Given the nature and low impact use of the proposed solar farm, it is not expected that it will require additional wastewater disposal facilities or adversely impact existing facilities in the region.

Drainage:

Surface runoff from the Petition Area flows into existing natural ditches and streams that converge into Waiawa Stream and ultimately into Pearl Harbor.

According to Kamehameha Schools, site preparation for the solar farm will be relatively minor. Material delivery, site preparation, and the installation of the solar panels will take place under the supervision of an experienced construction management team. The proposed draft grading plan for Phase 1 indicates that approximately 400,000 cubic yards of balanced cut/fill across the Petition Area will be necessary to install the fixed tilt racking system of the modules. Kamehameha Schools points out that all grading work will be done pursuant to grading procedures mandated by the City Code and as shown on plans approved by the City. The grading plans will include existing and proposed contours, erosion and sediment control measures, limits of

grading providing the proper setbacks from the property lines, the location of any structures or easements, and drainage patterns or devices. Kamehameha Schools represents that at least 180 days prior to the commencement of construction activities, SunEdison will file for a National Pollutant Discharge Elimination System ("NPDES") permit to ensure control of sediment, erosion, and drainage for all construction activities including clearing, grubbing, and grading.

Potential mitigation measures that may be implemented include retention basins, drainage rerouting, recharge areas, pollution prevention devices, and best management practices. It is further represented that SunEdison will comply with all applicable municipal, state, and federal regulations and guidelines.

Solid Waste Disposal: Kamehameha Schools represents that SunEdison will recycle the metal components utilized as part of the solar farm to the extent possible following decommissioning of the facility. It is further represented that SunEdison will not dispose of any solar farm components in a Hawaii landfill.

Educational Facilities:

There are no school facilities on the Petition Area. Given the nature and low impact use of the proposed solar farm, it is not anticipated that it will require additional educational facilities or adversely impact existing facilities in the region.

As part of SunEdison's development of a solar farm on the Petition Area, it will cooperate with Kamehameha Schools to support various educational programs during the term of the development. Although the final details of an agreement for such cooperation have not been determined, it is expected that it will include internships, coordination of opportunities for hands-on experience in biological monitoring or mitigation activities, meteorological data analysis, or student-facilitated tours of the site, including providing students' access to non-proprietary and public data to support classroom/student projects. SunEdison may also offer presentations on the technical, environmental, logistical, and economic aspects of commercial solar energy generation.

Police & Fire Protection: It is not anticipated that the proposed solar farm will require additional police and fire protection services or adversely impact existing services in the region given its nature and low impact use. Monitoring of the facility will be done remotely. Cleaning of the solar panels will be done twice a year (depending on rainfall) with water that will be trucked onto the site. Perimeter fencing will be installed to secure the site and security/maintenance personnel will be present.

Medical Services:

There are no medical facilities on the Petition Area. Given the nature and low impact use of the proposed solar farm, it is not anticipated that it will require additional medical facilities and services or adversely impact existing facilities and services in the region.

Electrical & Telephone Services:

An existing 46kV transmission line located across and within the Petition Area running along the H-2 Freeway will connect the solar energy produced by the solar farm to the grid. It is estimated that the proposed solar farm will produce at least 50 MW of clean energy. The solar energy will be supplied to HECO. Kamehameha Schools points out that the development will not inhibit or restrict HECO's ability to accept PV power from individual homes and businesses that also wish to use solar energy. Residential and commercial PV systems and utility scale solar power, as proposed by SunEdison for the Petition Area, differ in their grid connection levels or points. In the future, if the total amount of solar energy generated from residential, commercial, and utility scale systems exceeds what the HECO grid is able to absorb, it will be the utility scale projects that will be temporarily curtailed (i.e., stopped from generating power). Kamehameha Schools notes that there is no mechanism that allows HECO to curtail the amount of power produced by individual residences or businesses.

It is not anticipated that the proposed solar farm will require additional telephone or other communication services or adversely impact existing services in the region given its nature and low impact use.

6. COMPLIANCE WITH THE CONDITIONS

The Decision and Order contained ten conditions. Condition No. 6 was amended by the Order Granting Motion to Amend Condition No. 6 of the Decision and Order Dated May 17, 1988.

1. A study funded by the U.S. Department of the Navy to review the potential for groundwater contamination resulting from the urbanization of the Property shall be completed prior to any site development and construction unless the Department of Health after consultation with the United States Navy and after review of the propose study scope makes a determination that development and construction within a specified area will not cause groundwater contamination to wells in the area. Petitioner shall not proceed with the project until the study shows to the satisfaction of the Department of Health that groundwater contamination will not occur as a result of the proposed project, or until the Department of Health makes a determination that development or partial development may be allowed.

Kamehameha Schools states that Condition No. 1 has been satisfied. It is noted that the DOH prepared a study entitled *Report to the Office of State Planning by the Department of Health Safe Drinking Water Branch on the Delineation of the Hydrologic Zone of Contribution for the U.S. Navy Waiawa Shaft (Revised Dec. 1990)*. The Navy agreed with the methodology of the study and the location of the zone of contribution. A copy of the study was sent to OP in 1991.

2. Any urban development within the Property shall be subject to further review and subsequent approval by the Department of Health. The Department of Health may require appropriate mitigative measures and conditions relating to the proposed development's impact on the groundwater resources in the area.

Kamehameha Schools acknowledges that compliance with Condition No. 2 is ongoing. Kamehameha Schools argues that the proposed solar farm does not constitute "urban development" based on its less intensive use relative to Petitioner's originally planned residential community. Both the Navy and the DOH have been apprised of the solar farm and were solicited for comments. The DPP included a letter from the Navy in its Statement of Position on the Motion. The Navy noted that all of its concerns have been adequately addressed, and that the development is a compatible land use within the designated Hydrologic Zone of Contribution. The DOH did not raise any objections.

3. For the first 1,000 dwelling units which may be constructed on the Property, Petitioner shall provide housing opportunities for low, low-moderate, and moderate income Hawaii residents by offering for sale at least thirty percent (30%) of the units at prices which families with an income range of 80 to 120 percent of Oahu's median income can afford and thirty percent (30%) of the units which families with an income range of 120 to 140 percent of Oahu's median income can afford. This condition may be fulfilled through projects, under such terms as may be mutually agreeable, between Petitioner and the Housing Finance and Development Corporation of the State, or other appropriate governmental agency. This condition may also be fulfilled, with the approval of the Housing Finance and Development Corporation, through the construction of rental units to be made available at rents which families in the specified income ranges can afford.

Kamehameha Schools notes that the proposed solar farm does not include housing units; therefore, Condition No. 3 is not applicable.

4. For the balance of the Property, the affordable housing requirements shall be satisfied in a manner that meets with the approval of the City and County of Honolulu and the State Housing Finance and Development Corporation. Said requirements shall take into consideration affordable on-site or off-site housing units or cash payments that satisfy the then current housing needs, or other necessary or desirable community facilities as determined above.

Kamehameha Schools notes that the proposed solar farm does not include housing units; therefore, Condition No. 4 is not applicable.

5. Petitioner shall fund and construct the necessary improvements as determined by the State Department of Transportation which would mitigate impacts from the subject project. These improvements shall be implemented on a schedule acceptable to and approved by the Department of Transportation.

Kamehameha Schools points out that lands valued in excess of \$637,000 were dedicated for the construction of the Waipio Interchange. Also pointed out is the State's receipt of \$1.4 million for improvements to Ka Uka Boulevard and for the construction of HOV lanes between the Waiawa and Waipio Interchange of the H-2 Freeway. Despite these contributions, Kamehameha Schools believes that Condition No. 5 is not applicable as the proposed solar farm will not generate the impacts that were anticipated with the originally planned residential community.

6. Petitioner shall appoint and fund a transportation manager whose function is the formation, use, and continuation of alternative transportation opportunities that would

maximize the use of existing and proposed transportation systems. This will include construction and operation of a park and ride facility or other activities to encourage transit use or ridesharing. These activities and facilities shall be implemented on a schedule acceptable to and approved by the State Department of Transportation.

In the alternative, Petitioner may participate in a regional program for the transportation management with other developers and/or land owners. This program shall address the formulation, use and continuation of alternative transportation opportunities that would optimize the use of existing and proposed transportation systems.

Kamehameha Schools contends that Condition No. 6 has been met as it is an active participant in LOTMA.

7. Petitioner shall participate in an air quality monitoring program as specified by the State Department of Health.

Kamehameha Schools argues that the proposed solar farm will not generate the impacts to air quality as was envisioned with the originally planned residential community. In the event plans are made to undertake development of a portion of the residential community, Kamehameha Schools represents that it will comply with the condition and will consult with the DOH.

8. Petitioner shall immediately stop work and contact the State Historic Preservation Office should any archaeological resources such as artifacts, shell, bone, or charcoal deposits, human burial, rock or coral alignments, pavings or walls be encountered during the project's development.

Kamehameha Schools notes that the SHPD approved an archaeological reconnaissance and inventory survey of the Petition Area in 1992. In 2003, a CIA was prepared followed by a CRPP in 2005, the latter of which was approved by the SHPD in 2007. Four sites were proposed for in situ preservation. Pursuant to the recommendation of the SHPD, an AIS was prepared and submitted to the SHPD by letter dated September 16, 2014.

9. Petitioner shall provide public access to the Conservation District land mauka of the Property.

Kamehameha Schools contends that there are no Conservation District lands adjacent to the Petition Area, and that the only feasible means of accessing such lands is through the Waiawa Correctional Facility.

- 10. Petitioner shall provide annual reports to the Land Use Commission, the Department of Business and Economic Development and the City and County of Honolulu Department of General Planning in connection with the status of the project and Petitioner's progress in complying with the conditions imposed.
 - Kamehameha Schools notes that compliance with this condition is ongoing and will continue as such during the term of the proposed solar farm.

7. POSITION OF THE PARTIES

<u>OP</u>

OP recommends approval of the Motion subject to conditions as described below. As part of its analysis, OP circulated the Motion to various agencies, including the Department of Land and Natural Resources, SHPD, and the Division of Forestry and Wildlife; the Department of Agriculture ("DOA"); the Department of Transportation ("DOT"); the DOH; the Commission on Water Resource Management; the Department of Public Safety ("DPS"); the Hawaii State Energy Office ("SEO"); and the Navy. Based on the agencies' comments, OP has raised concerns in the following areas:

Groundwater and Surface Water Resources

OP believes that grading activities during site preparation may cause erosion, leading to sediments that present a contamination risk to groundwater. According to OP, the DOH will be reviewing and approving an NPDES permit application for stormwater associated with the site grading activities. OP requests that Kamehameha Schools clarify the stormwater management, monitoring, and best management practices that will be implemented as part of the solar farm development. OP also requests that Kamehameha Schools clarify whether the extent of the Phase 2 location within the Hydrologic Zone of Contribution was shown to the DOH. OP further requests that Kamehameha Schools clarify the location of the substation and battery storage facilities for both phases.

Access

OP notes that the DPS expressed concerns about access to its Waiawa Correctional Facility ("WCF") located mauka of the Petition Area. It was noted that the solar farm development had the potential to impede access to Ka Uka Boulevard during construction. In addition, it was pointed out that the already deteriorating Mililani Memorial Park Road could be further damaged by heavy equipment traffic generated by the development. The DPS requests Kamehameha Schools provide advance notice of planned activities that may impact access to the WCF. As such, OP recommends that a condition be imposed to ensure road accessibility for the WCF is available at all times during the construction of the development.

¹⁰ In comments on the Motion, the DOH noted that there would be minimal or no impacts on the groundwater from the proposed solar farm development.

Archaeological/Historical Assessment

The SHPD determined that there are historic properties present within and/or in immediate proximity to the Phases 1 and 2 areas, including possibly the Puoiki Heiau located outside the southeast boundary of the Phase 2 development area. OP notes that the SHPD believed there was insufficient information to determine that no historic properties will be affected by the solar farm development as more than 20 years have passed since the last AIS was conducted. SHPD recommended that a supplemental AIS be conducted for the entire Petition Area. OP's proposed condition further specifies that said survey be submitted to the SHPD and accepted prior to the start of construction.

Transportation

OP notes that the DOT expressed concern about the potential for glare reflections from the solar farm development that may have an adverse impact on the visibility of pilots. The DOT pointed out that if this turned out to be the case, the facility operator must be prepared to immediately mitigate the hazard upon notification by the DOT, Airports Division, or the Federal Aviation Administration. In light of the DOT's concern, OP's proposed condition requires Kamehameha Schools to implement mitigation measures to address the hazard.

OP also notes the concern about the location of the access road connecting to the Mililani Cemetery Road. The DOT believed that the access road should be located as far as possible from the connection to Ka Uka Boulevard to avoid queuing onto the boulevard. As such, the DOT recommended that Kamehameha Schools prepare and submit a traffic assessment for review and acceptance by the DOT. OP's proposed condition requires Kamehameha Schools to submit this assessment for the DOT's review and acceptance prior to construction.

Sustainability, Energy, and Resource Use

The SEO recommended that Kamehameha Schools confirm via a HECO interconnection requirements study or comparable study/report that the solar farm development will not adversely impact HECO's ability to accept PV power from individual homes and businesses that also seek to use solar energy. Based on this recommendation, OP requests that Kamehameha Schools address the SEO's concerns.

Agricultural Resources

The DOA recommended that Kamehameha Schools consider the use of livestock or other compatible agricultural use for vegetation control.

Revised Master Plan

Given the proposed 35-year timeframe of the solar farm development, the Castle & Cooke Waiawa incremental districting approval, and the lack of development of the original residential community on the Petition Area, OP recommends a condition requiring Kamehameha Schools to submit a revised master plan and schedule for the development of the Petition Area within five years from the date of the Decision and Order granting the Motion.

Development Schedule

OP recommends a condition requiring that Phase 1 and Phase 2 be completed within five and ten years, respectively, from the approval date of the Decision and Order.

DPP

The DPP has no objection to recognizing Kamehameha Schools as the successor to the Petitioner. With respect to authorizing the use of portions of the Petition Area for development of a solar farm for an interim period not to exceed 35 years, the DPP requests that the DOH, Safe Drinking Water Branch, further review and approve the development in the Hydrologic Zone of Contribution.¹¹

The DPP also notes that the majority of the Phase 2 development area is within the Hydrologic Zone of Contribution. The DPP further notes that while the Navy agreed the proposed solar farm is a compatible land use within the zone, the DOH, Safe Drinking Water Branch, should be consulted on whether the development is compatible with source water protection in the area. The DPP's additional comments confirm that the development falls under the category of Utility Installations, Type B, which is a permitted use within any zoning district subject to approval of a Conditional Use Permit – Minor. Finally, the DPP points out that if either a subdivision or residential building permit is proposed in the future, some of the existing conditions of the Unilateral

¹¹ According to the comments of the DOH (OP Ex. 2) included in OP's Response to the Motion, the solar farm development should have minimal or no impact on groundwater and is acceptable to the Safe Drinking Water Branch.

Agreement attached to Ordinance 98-01 may be triggered, including the affordable housing requirement.						

8. **RECOMMENDATION**

In the event the Commission is inclined to grant Movant's Motion, staff suggests that the following matters be addressed on the record (if Kamehameha Schools fails to provide the information in a satisfactory manner to the Commission, staff recommends that action on the Motion be deferred until such time that the information is provided):

Original Proposal for Petition Area

At the present time, Kamehameha Schools is reevaluating the original residential community proposed by Petitioner as well as other options for development of the Petition Area. As an initial step in this process, Kamehameha Schools intends to complete its 2015-2040 Strategic Plan, which will address the overall goals relative to Kamehameha Schools' educational mission as well as identify issues and formulate strategies to address those issues. Kamehameha Schools will then proceed on a regional plan, which is envisioned to be defined by 2017. Thereafter, Kamehameha Schools plans to commence master planning of the Petition Area, which will involve the preparation of studies addressing infrastructural, traffic, cultural, and other issues to evaluate the feasibility of desired scenarios.

Kamehameha Schools should clarify the timeframes to complete the 2015-2040 Strategic Plan and the master planning of the Petition Area.

Community Benefits

During the hearings on the Petition, Petitioner made various representations that the original residential community would provide much needed housing, jobs, commercial activities, recreational opportunities, infrastructural improvements, governmental revenues, and other benefits to the community at large in support of the urban reclassification of the Petition Area.

For example, to address the need for affordable housing, Petitioner proposed to participate by committing 60 percent of the conventional housing units for sale within affordable price ranges (30 percent within \$85,000 to \$140,000 and 30 percent within \$140,000 to \$175,000 – 1987 dollars). Petitioner proposed to participate in affordable housing programs for the remaining residential units in consultation with the City and County of Honolulu, the then State Department of Housing and Community Development and/or the State Housing and Finance Development Corporation.

It was also represented that within the development, there would be approximately 3,400 permanent jobs created. It was projected that 70 percent of the jobs would be related to the industrial park and the food service center. The remaining 30 percent of

the jobs would be related to the commercial areas, golf course, and the other activities within the residential community.

In addition, it was projected that over the entire construction period of the residential community, the State of Hawaii would incur net revenues of approximately \$90 million annually. At full development, the residential community was anticipated to generate net revenues to the City and County of Honolulu on the order of approximately \$3 million annually, while the State of Hawaii would experience annual net revenues of approximately \$9.5 million.

Although the Petition Area remains classified within the Urban District, none of the aforementioned community benefits have come to fruition.

In lieu of the development of the residential community at this time, Kamehameha Schools should clarify how it intends to follow through with the original representations made regarding the community benefits during the time in which the solar farm is located on the Petition Area. In the alternative, Kamehameha Schools should address how the expected community benefits with the solar farm will equal or exceed those originally anticipated with the residential community. To this end, Kamehameha Schools should provide a socio-economic comparison of the solar farm to the residential community in the context of the abovementioned community benefits.

<u>Impacts of the Proposed Solar Farm</u>

Kamehameha Schools anticipates that the proposed solar farm will have less impact than the originally proposed residential community. While the Motion includes discussion of the solar farm and its impacts or lack thereof on major areas of concern, it does not specifically address the development in the context of the overall community, flora and fauna, and recreational, wastewater, and medical facilities. As staff indicated in footnote 8, statements that the development is not anticipated to impact certain areas of concern because of its nature and low impact use are based solely on staff's analysis of the description of the development in the Motion as Kamehameha Schools is silent in regard to the impacts on these areas.

Kamehameha Schools should address this matter on the record to ensure that any Order amending the Decision and Order is supported by findings of fact in these areas.

Timeframe of Phase 1 and Phase 2

Site preparation and construction for Phase 1 is planned by June 2015. The entire construction period for Phase 1 could take up to 12 months, consisting of three months for all grading activities and nine months for panel installation. Full operation of the site is anticipated by June 2016. The solar farm is envisioned to be in operation until

sometime between 2036 and 2046. The actual term of the operational phase will be determined by the Power Purchase Agreement to be negotiated between SunEdison and HECO. According to Kamehameha Schools, SunEdison may undertake a second phase of the solar project. The operational term of Phase 2 would end no later than the term of Phase 1.

Kamehameha Schools should justify the basis for the proposed 30 to 35-year timeframe. Were shorter or longer timeframes considered as an alternative? Kamehameha Schools should also identify the criteria that will determine whether Phase 2 will be pursued. In addition, the factors that will be considered in negotiating the Power Purchase Agreement should be disclosed. Will Kamehameha Schools, the Commission, and/or the public have any input into its development?

Relationship with the Castle & Cooke Waiawa Development

Given the current proposal for a solar farm on the Petition Area for a period of approximately 30 years (with the total interim use period not to exceed 35 years), it is unlikely that the adjoining Castle & Cooke Waiawa development will be developed as previously represented by CCHHI unless the aforementioned infrastructural improvements are completed.

Kamehameha Schools should clarify whether it intends to undertake the infrastructural improvements within the timeframe projected to facilitate the development of Castle & Cooke Waiawa.

Interconnection Requirements Study

OP requested that Kamehameha Schools address the SEO's recommendation that Kamehameha Schools confirm via a HECO interconnection requirements study or comparable study/report that the solar farm development will not adversely impact HECO's ability to accept PV power from individual homes and businesses that also seek to use solar energy. Kamehameha Schools' Exhibit 36, an Interconnection Feasibility and Impact Assessment, appears to have been submitted in response to the SEO's comments.

OP should clarify whether this assessment addresses the SEO's concerns in their entirety.

Traffic Assessment

DOT recommended that Kamehameha Schools prepare and submit a traffic assessment for review and acceptance by the DOT. OP's proposed condition requires Kamehameha Schools to submit this assessment for the DOT's review and acceptance prior to construction. Kamehameha Schools' Exhibit 35, a traffic assessment for the proposed solar farm, was prepared in response to the DOT's comments.

Kamehameha Schools should clarify whether the DOT has reviewed and accepted the traffic assessment.

AIS

The SHPD recommended that a supplemental AIS be conducted for the entire Petition Area. OP's proposed condition specifies that said survey be submitted to the SHPD and accepted prior to the start of construction. An AIS was prepared and submitted to the SHPD by letter dated September 16, 2014.

Kamehameha Schools should clarify whether the SHPD has reviewed and accepted the AIS.

Additional Conditions

Given the proposed new use of the Petition Area, there are no conditions of record that address its specific impacts. At a minimum, staff recommends that the following standard Commission conditions be imposed:

- 1. Petitioner shall develop the Petition Area, including the implementation of measures to mitigate potential impacts as a result of the development, in substantial compliance with the representations made to the Commission.

 Failure to so develop the Petition Area may result in reversion of the Petition Area to its former classification, or change to a more appropriate classification. 12
- 2. Petitioner shall give notice to the Commission of any intent to sell, lease, assign, place in trust, or otherwise voluntarily alter the ownership interests in the Petition Area, prior to development of the Petition Area.
- 3. Petitioner shall timely provide without any prior notice, annual reports to the Commission, the Office of Planning, and the City and County of Honolulu Department of Planning and Permitting in connection with the status of the subject project and Petitioner's progress in complying with the conditions

¹² Staff has added language to the standard condition to include reference to Kamehameha Schools' (Petitioner herein) various representations regarding mitigation of potential impacts from the proposed development. OP also recommends a condition regarding compliance with representations, but it does not specifically include the implementation of mitigation measures under the umbrella of development.

- imposed herein. The annual report shall be submitted in a form prescribed by the Executive Officer of the Commission.¹³
- 4. The Commission may fully or partially release the conditions provided herein as to all or any portion of the Petition Area upon timely motion and upon the provision of adequate assurance of satisfaction of these conditions by Petitioner.
- 5. Within seven (7) days of the issuance of the Commission's Decision and Order for the subject reclassification, Petitioner shall: (a) record with the Bureau of Conveyances a statement that the Petition Area is subject to conditions imposed herein by the Commission in the reclassification of the Petition Area; and (b) shall file a copy of such recorded statement with the Commission.
- 6. Petitioner shall record the conditions imposed herein by the Commission with the Bureau of Conveyances pursuant to section 15-15-92 Hawaii Administrative Rules.

Staff also recommends the following conditions proposed by OP (and other state agencies) be imposed requiring that:

- 1. Road accessibility for the WCF shall be available at all times during the construction of the development;
- 2. A supplemental AIS be conducted for the entire Petition Area and shall be submitted to the SHPD and accepted prior to the start of construction;¹⁴
- 3. Mitigation measures shall be implemented to address the potential for glare reflections from the solar farm development that may have an adverse impact on the visibility of pilots;
- 4. A traffic assessment addressing the location of the access road connecting to the Mililani Cemetery Road shall be prepared and submitted for the DOT's review and acceptance prior to construction;¹⁵

¹³ The Decision and Order contains an annual report condition; however, it does not reflect the current language of the Commission's standard condition.

¹⁴ An AIS has been submitted to the SHPD. Staff recommends that this condition be imposed unless the SHPD has already accepted the AIS.

¹⁵ A traffic assessment has been prepared for the proposed solar farm. Staff recommends that this condition be imposed unless the DOT has already accepted the assessment.

- 5. A HECO interconnection requirements study or comparable study/report shall be prepared to indicate that the solar farm development will not adversely impact HECO's ability to accept PV power from individual homes and businesses that also seek to use solar energy;¹⁶
- 6. The use of livestock or other compatible agricultural use for vegetation control shall be considered; and
- 7. Phase 1 and Phase 2 shall be completed within five and ten years, respectively, from the approval date of the Decision and Order.

Staff additionally recommends the following condition be imposed based on DPP's comments requiring that:

1. The conditions of the Unilateral Agreement attached to Ordinance 98-01, including the affordable housing requirement, shall be complied with if either a subdivision or residential building permit is proposed in the future.

Staff further recommends the following conditions be imposed based on Kamehameha Schools' representations that (i) the interim use of the Petition Area will be limited to a utility-scale solar energy development, or solar farm; (ii) the proposed solar farm on the Petition Area will not exceed a period of 35 years (30 years of operation and 5 years for permitting, construction, and decommissioning); (iii) the proposed solar farm will be limited to the acreage and boundaries identified in Kamehameha Schools' Phasing Plan shown in Exhibit 8 Errata (filed June 20, 2014); and (iv) the planning process to ultimately develop a master plan for the Petition Area has already commenced with Kamehameha Schools' ongoing 2015-2040 Strategic Plan update:

- 1. The interim use of the Petition Area shall be limited to a utility-scale solar energy development, or solar farm. No other use shall be permitted without the prior written approval of the Commission.
- 2. The interim use of the Petition Area for the proposed solar farm, including any and all permitting, construction, operation, and decommissioning activities associated with the solar farm, shall not exceed a period of 35 years from the date of this Decision and Order without the prior written approval of the Commission.

¹⁶ An Interconnection Feasibility and Impact Assessment has been prepared for the proposed solar farm. Staff recommends that this condition be imposed unless it is determined that the assessment fully addresses the SEO's concerns.

- 3. The proposed solar farm shall be limited to the acreage and boundaries identified in Petitioner's Phasing Plan shown in Exhibit 8 Errata (filed June 20, 2014). Petitioner shall provide a metes and bounds map and description of both phases to the Commission within one year from the date of this Decision and Order.
- 4. A revised master plan and schedule for the development of the Petition Area shall be submitted to the Commission within ten years from the date of this Decision and Order.

Finally, staff recommends a condition be imposed requiring decommissioning of the solar farm following its operational timeframe and further requiring that any future use of the Petition Area shall be subject to the environmental review process promulgated under chapter 343, HRS, as applicable, and require Commission approval.

1. The solar farm shall be decommissioned following its operational timeframe. The decommissioning activities shall include but not be limited to the complete removal of the foundational piers and modules and all associated components. All metal components shall be recycled to the extent possible and no solar farm components shall be disposed of in any landfill in the State of Hawai`i. Any future use of the Petition Area following the decommissioning of the solar farm shall be subject to the environmental review process promulgated under chapter 343, HRS, as applicable, and shall require the filing of a motion to amend the Decision and Order with the Commission. Such motion to amend shall include a revised master development plan of the proposed use and shall further include but not be limited to a revised Traffic Impact Analysis Report, Engineering Report, Socio-Economic Analysis Report, Environmental Report, and Archaeological Inventory Survey Report.